An Epidemic Slated for New Hampshire's Youth

Obesity is a costly public health concern that affects personal and family well being, state budgets, and economic productivity. This disease is often attributed to a sedentary lifestyle and affects children, adolescents, and adults. The rates of obesity among U.S. adults have risen drastically in the last two decades. Obesity rates among U.S. Adults has grown to 15-19 percent; 29 states have rates of 20-24 percent, and one state reports a rate over 25 percent. (Mokdad, 1999). Without significant changes in health habits the Surgeon General's Report (2001) and the Centers for Disease Control (CDC, 2000) predict that this trend will continue to escalate. Surgeon General, David Satcher (2001) stated that 300,000 deaths per year are associated with being overweight and obese. He further projected that the annual public health cost of this disease at \$117 billion, due to the life-threatening complications of being overweight and obese such as diabetes, hypertension, heart disease, cancer, kidney failure, and other ailments.

Obesity is also affecting our children's potential as students. The following is a quick reference to the status of the children's health in the U.S.

- At present, more than 10% of 2-to 5-year old children and 15% of 6-to 19-year-old children and adolescents are overweight (Ogden et al. 2002) This is double and triple the rate, respectively, of just 20 years ago.
- Overweight youth have a 70% to 80% chance of remaining overweight or becoming obese as adults (U.S. Surgeon General 2001).
- As a result of excessive weight, Type 2 diabetes rare among children as recently as ten years ago has become a pediatric ailment of serious concern, now accounting for 8% to 45% of new pediatric diabetes cases depending on geographic location (Kaufman 2002).
- One in three U.S. children born in 2000 will become diabetic unless many more people start eating less and exercising more (Narayan et al. 2003).
- Annual obesity-associated hospital costs among youths between the ages of 6 and 17 have increased from \$35 million during 1979-81 to \$127 million during 1997-99. (Wang & Dietz 2002).
- Almost half of young people aged 12 to 21 and more than a third of high school students do not participate in vigorous physical activity on a regular basis (NASPE 2001).
- Currently, only one state requires daily physical education at all grade levels (NASPE, 2001).
- Student participation in physical education continues to decline. In 1991, 42% of high school students had physical education every day during at least one semester. By 1999, that figure had dropped to 29%, but by 2001 it had started to climb again to 32% (CDC 2003).

In the summer of 1996, the U.S. Surgeon General published Physical Activity and Health, a landmark report designed to reverse the trends. In December 2001, the Surgeon General stated, "The obesity epidemic is the No.1 health threat in the United States. It has all the characteristics of a mass epidemic." In order to combat this growing trend among children and youth, a unified team of the families, community organizations, educators and governmental agencies need to combine forces. Schools provide the environment where students learn the concepts and activity behaviors needed to develop better students. Providing quality, daily physical education (PE) instruction may be the agent in teaching children to make healthy choices.

The importance of a quality physical education program is linked to a higher quality of life as well as academic achievement. It is well documented that regular physical activity in childhood and adolescence improves strength and endurance, helps build healthy bones and muscles, helps control weight, reduces anxiety and stress, increases self-esteem and may improve blood pressure and cholesterol levels (CDC, July 2000). Similarly, students who get adequate physical activity and who have regular, sequential physical education are stronger students – physically and mentally. Numerous studies (Etnier et al.1997, Keays & Allison 1995, NASPE/CPEC 2001, NASPE 2002, President's Council 1999, Sallis et al. 1999, Shephard 1996, Shephard 1997, Shephard et al. 1984, Symons et al. 1997) provide data that adequate physical and physical activity strengths academic achievement. A recent study by the California State Department of Public Instruction "provide[d] compelling evidence that the physical well-being of students has a direct impact on their ability to achieve academically. We now have the proof we've been looking for: students achieve best when they are physically fit" (NASPE 2002).

As the evidence mounts for the need of daily, quality physical education programs in order to counteract the trend of obesity and inactivity among children and adolescents, New Hampshire has

Developed a NH Youth Media Campaign policy statement in 2002. Multiple
agencies/organizations met on July 7, 2002 and September 28, 2002 to maximize
opportunities for NH's children to be physically active and endorse the following
statewide physical activity statement.

We, the undersigned, will coordinate our resources and work together to identify necessary strategies that will increase the opportunities for every child in NH to be active daily. Our efforts to promote better health for NH's children and youth through physical activity will be designed to help children 'discover the joys of physical activity and incorporate physical activity as a fundamental building block of their present and future lives.' (Promoting Better Health for Young People Through Physical Activity and Sports, A Report to the President from the Secretary of Health and Human Services and the Secretary of Education – Fall 2000, p.3)

• Established a Healthy School's Coalition in 2002. Within this coalition, the NH Healthy Schools Initiative Training developed.

- Received a Physical Education for Progress (PEP) to 1) train and certify public school physical educators and nurses to assess the fitness level of NH's children and adolescents, 2) survey parents and school administrators' behaviors toward physical activity, fitness and physical education, 3) create baseline data on NH children's fitness levels, and develop intervention strategies to reverse this trend of inactivity.
- Developed Healthy New Hampshire 2010 goals. Three objectives work toward an increase in physical activity and physical education for children and adolescents within NH's public schools.
- Developed Action for Healthy Kids Initiative whose number one goal is to provide all children, pre-K to grade 12, with quality, daily physical education that helps develop the knowledge, attitudes, skills, behavior and confidence needed to be physically active for life.
- Received An Endowment for Health grant. This grant is a statewide initiative that will provided professional development and resources to public school health educators, physical educators and nurses throughout New Hampshire (NH). Participants will incorporate the Physical Best/Fitnessgram.

There are several organizations within NH that feel the health consequences for our children and youth, both now and in the future, are staggering. It is a concern that perhaps some of these individuals within these organizations do not possess a common vocabulary when differentiating among physical activity, physical fitness and physical education. The words are often used interchangeably, yet the meaning is quite distinct between each term. Therefore, the following terms are defined to establish a baseline.

Physical activity: Bodily movement that is produced by the contraction of skeletal muscle and substantially increases energy expenditure (USDHHS, 1996). Physical activity is used as an umbrella term that has multiple dimensions or sub-categories of physical activity.

Physical Activity

Exercise Sport Leisure Activities Dance Others

Physical fitness is the body's ability to function efficiently and effectively. It is a state of being that consists of at least five health-related and six skill-related, physical fitness components, each of which contributes to total quality of life. (Corbin, 2000).

Physical Education is a subject matter that teaches concepts and skills that are not taught in any other discipline. This unique subject matter teaches students to 1) move efficiently and effectively, 2) achieve and maintain a level of fitness, 3) identify the need for physical activity and 4) value movement during exercise, activity or sport.

What constitutes a quality PE program? The National Association for Sport and Physical Education (NASPE) and the Centers for Disease Control and Prevention (CDC) agree

that the following are critical elements within a PE program in order to meet the goals of developing a student with the knowledge, skills and attitudes to lead a physically active lifestyle. A quality program, instructed by a certified physical education specialist, must include:

- Program centered around content standards
- Planned, sequential K-12 curricula
- Daily scheduling of PE classes
- Manageable class size
- Time for authentic assessment
- Appropriate equipment for all children
- Adequate indoor and outdoor facilities
- Inclusion of technology

It is hoped that through a collaborative effort that this obesity epidemic can be reversed. It will take the efforts of several agencies, organizations, and communities to establish programs that will endorse the importance of physical activity in every child's life.

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